

Summary

Claims 1-78 were pending. Claims 1, 4-5, 12-14, 16 and 18-20 have been rewritten and Claims 11 and 78 cancelled. No new matter has been added as a result of this amendment.

Claim Rejections

Claims 1-5, 9-10, 15-19 and 78 were rejected under 35 U.S.C. §102(a) and/or 102(b) as being anticipated by Hayashi (JP 2002-050011) and under 35 U.S.C. §102(a) and/or 102(e) as being anticipated by Hayashi (U.S. Patent Application Publication 2002/0097540); Claims 1, 9-10, 14, 15-17 and 78 were rejected under 35 U.S.C. §102(e) as being anticipated by Ho (U.S. Patent 6,754,056); Claims 6-8 were rejected under 35 U.S.C. §103(a) as being unpatentable over either Hayashi JP or USPAP in view of Singleton (U.S. Patent 6,700,753); Claim 15 was rejected under 35 U.S.C. §103(a) as being unpatentable over either Hayashi JP or USPAP in view of Komuro (U.S. Patent Application Publication 2002/0097536 now U.S. Patent 6,587,318); Claims 2-3 were rejected under 35 U.S.C. §103(a) as being unpatentable over Ho in view of either Hayashi JP or USPAP; Claims 6-7 were rejected under 35 U.S.C. §103(a) as being unpatentable over Ho in view of Singleton; and Claim 8 was rejected under 35 U.S.C. §103(a) as being unpatentable over Ho in view of either Hayashi JP or USPAP in further view of Singleton.

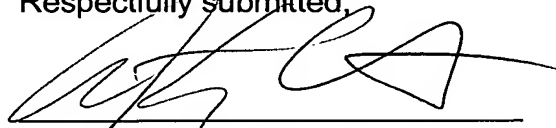
Claims 11-14 and 20 were objected to as being dependent on a rejected base claim but the Examiner indicated it would be allowable if rewritten in an independent form including all of the limitations of the base claim and any intervening claims. Applicants have rewritten Claim 1 to incorporate the elements of Claim 11 and cancelled Claim 11.

Applicants have further rewritten Claim 1 in a manner suggested by the Examiner. For example, a pair of second antiferromagnetic layers is now recited, over whose upper surfaces a continuous second free magnetic layer is disposed. The second free magnetic layer is also disposed over an upper surface of the first free magnetic layer.

Conclusion

Applicants respectfully submit that all of the pending claims are in condition for allowance and seek an allowance thereof. If for any reason the Examiner is unable to allow the application in the next Office Action and believes that a telephone interview would be helpful to resolve any remaining issues, she is respectfully requested to contact the undersigned.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'AP Curtis', written over a horizontal line.

Anthony P. Curtis, Ph.D.
Registration No. 46,193
Attorney for Applicants

BRINKS HOFER GILSON & LIONE
P.O. BOX 10395
CHICAGO, ILLINOIS 60610
(312) 321-4200